

This podcast is presented by The Centers for Disease Control and Prevention. CDC - Safer. Healthier. People.

This is Dan Rutz with a CDC update on an important, on going public health investigation.

The investigation into an outbreak of *E. coli* O157:H7 infection continues. The outbreak is associated with contaminated fresh raw spinach and includes multiple states. Over 100 people are reported to have taken ill after eating raw spinach contaminated by the *E. coli* bacterium. The Centers for Disease Control and Prevention, and Food and Drug Administration are working with state and local public health partners to identify any additional cases or causes. Presently, the investigation indicates that fresh spinach and salad blends containing fresh spinach are a source for this outbreak. CDC advises at this time that people not eat *any* fresh spinach or salad blends containing fresh spinach that would be consumed raw.

*E. coli* O157:H7 is a bacterium that causes diarrhea that is often bloody; the diarrhea can be accompanied by abdominal cramps. Fever may be absent or mild. Symptoms usually occur within 2-3 days following exposure, but may begin as soon as 1 day following exposure or up to a week following exposure. Healthy adults can typically recover completely within a week. However, some people, especially young children and the elderly, can develop Hemolytic Uremic Syndrome as a result of exposure to *E. coli*, a condition that can lead to serious kidney damage and even death.

As a result of the outbreak, two California companies, Natural Selection Foods and River Ranch, have voluntarily recalled products containing fresh spinach. Natural Selection Foods specifies fresh spinach products with "Best if Used by Dates" of August 17<sup>th</sup> through October 1, 2006 in the recall.

Other companies and brands of fresh spinach and products that contain fresh spinach may also be involved in this outbreak. As CDC continues to investigate this possibility, the Agency recommends against eating all and any uncooked fresh spinach. That advice extends to salad blends containing fresh spinach that are eaten raw.

*E. coli* O157:H7 in spinach can be killed by cooking at 160° Fahrenheit for 15 seconds. (Water, you will note, boils at 212° Fahrenheit.) However, if spinach is cooked in a frying pan, and all parts do not reach 160° Fahrenheit, all bacteria may not be killed. What's more, those choosing to cook the spinach should not allow the raw spinach to contaminate other foods and food contact surfaces, and they should wash hands, utensils, and surfaces with hot, soapy water before and after handling the spinach.

Persons who develop diarrhea after eating fresh spinach or salad blends containing fresh spinach are urged to contact their health care provider and ask that their stool specimen be tested for *E. coli* O157.

Persons who ate fresh spinach or salad blends and who feel well do not need to see a health-care provider.

CDC has been using two food safety systems, PulseNet and OutbreakNet, to respond to this outbreak. Following a call on Friday September 8 from Wisconsin's state

epidemiologist regarding four cases of hemolytic-uremic syndrome in that state, CDC has been working collaboratively with state health departments and the Food and Drug Administration (FDA) to rapidly detect infections, identify the cause of the infections, and provide information on treatment and prevention of *E. coli* O157:H7 infection for the public and health care providers.

The [PulseNet system](#), part of the Association of Public Health Laboratories and coordinated by CDC, detected clusters of infection in Oregon and Wisconsin, which initiated investigations in each state. The first cluster was detected on Friday September 8 in one state, and the second cluster emerged in the second state on Wednesday September 13, by which time PulseNet had also identified potential associated cases in other states.

The OutbreakNet, a group of state public health officers who investigate foodborne infection outbreaks, shared information with CDC that indicated that Oregon and Wisconsin were considering the same hypothesis: fresh spinach as the possible vehicle of infection. The group tracked and updated the increasing case count and exposure information. During a multistate telephone conference call on Thursday, September 14, the group noted that the data strongly suggested that fresh spinach was a likely source. Within 24 hours of the outbreak, the data indicated that the outbreak was probably ongoing.

The outbreak is still going on, and there is still a great deal of epidemiological and laboratory work to be performed quickly to determine the definitive source of the outbreak and to control it.

During this time CDC recommends not eating any fresh spinach or products containing fresh spinach and any such products on hand be thrown away. Spinach products other than fresh and raw spinach products are NOT included in this outbreak and no other leafy greens, including lettuces have been implicated.

For updated information on the investigation of this outbreak, visit the CDC website at: <http://www.cdc.gov/foodborne/ecolispinach/>

For CDC, I'm Dan Rutz.

To access the most accurate and relevant health information that affects you, your family and your community, please visit [www.cdc.gov](http://www.cdc.gov).